

that the paper copy and computer readable copy of the Sequence Listing are the same. Applicant apologizes if this was not included with the last Response filed January 28, 2002.

The IDS filed October 30, 2000 was submitted without copies of many of the cited references because copies of these references had been previously submitted to the Patent Office in prior application USSN 08/837,305 (now U.S. Patent 5,965,532), which the present application claims priority to under 35 U.S.C. § 120. Under 37 CFR § 1.98(d), therefore, copies of references were not required. However, the Examiner has indicated that these references could not be found in the file of USSN 08/837,305. Applicant therefore is including herewith a copy of each reference cited in the IDS in order that each reference may be properly considered by the Examiner. For the convenience of the Examiner, Applicant has included another copy of the IDS submission of October 30, 2000. Applicant requests that Examiner consider the listed references, which have been included herewith, and return the initialed Form PTO-1449 listing the references with the next Office Action.

Claims 1 and 73 are pending in the application. Claims 1 and 73 stand rejected. Claims 1 and 73 are amended herein. No new matter is added to the application by this Amendment. Applicant respectfully requests reexamination and reconsideration of the case. Each of the rejections levied in the Office Action is addressed individually below.

**I. Rejection under 35 U.S.C. § 112, first paragraph, for lack of written description.**

Claim 1 has been rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Specifically, the Examiner has requested the Applicant to point out where descriptive support for the limitation, "n represents an integer between 1 and 200, inclusive," can be found in the specification. Applicant submits that literal support for this limitation can be found on page 53, at lines 7-8, and in claim 35 (*i.e.*, the claim which claim 73 is based on) of the originally filed application. Given the literal support for the definition of n in the application, Applicant requests that the rejection be removed.

II. **Rejection under 35 U.S.C. § 112, second paragraph, as being indefinite.** Claims 1 and 73 have been rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The Examiner states that claims 1 and 73 are indefinite because the phrase "capable of forming" is indefinite as to whether the forming takes place. Applicant respectfully disagrees and reiterates the arguments presented in the Response filed January 28, 2002; however, to further prosecution, Applicant has amended claims 1 and 73 to obviate this rejection.

With respect to the Examiner's concern about L having a weight of 2000 D and a length of only 20 Å, Applicant would like to point out that a range for both the molecular weight and distance are recited in each claim. As would be appreciated by one of skill in the art reading the specification and claims, a linker L of molecular weight 2000 D would typically span a distance toward the upper end of the 20 Å to 300 Å range. Conversely, a linker of a lower molecular weight would span a distance toward the lower end of the distance range. As would be appreciated by one of skill in the art, a linker satisfying the various limitations as outlined in the claims could take on many different forms from a simple carbon chain to a more complicated chain involving heteroatoms, and branching and cyclic structures. Applicant submits that the linker L has been defined as accurately as the subject matter reasonably permits. In *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.* 806 F.2d 1565 (Fed. Cir. 1986), the Court found the language "so dimensioned as to be insertable through the space between the doorframe of an automobile and one of the seats" in describing a pediatric wheelchair was definite because it was as accurate as the subject matter permits. The Court went on to add that the patent law does not require that all possible lengths corresponding to the spaces in hundreds of different automobiles be listed in the patent, let alone they be listed in the claims. MPEP 2173.05(b). Applicant therefore submits that the patent law does not require the recitation of all the possible chemical structures satisfying the limitations of the claims to be listed in the application or the claims. The claims with their distance and molecular weight requirements for the linker would not be indefinite to one of ordinary skill in the art; therefore, Applicant requests that the rejection be removed.

Examiner has also requested that the word "about" be deleted from the pending claims because it introduces indefiniteness as to the upper and lower limits of the ranges recited in the claims. Applicant disagrees and submits that "about" does not make the claims indefinite. The term "about" as used to define the area of the lower end of a mold was held to be clear. *Ex parte Eastwood* 163 USPQ 316 (Bd.App. 1968). Since then the Federal Circuit has also upheld the definiteness of the term "about" where the Court held that a limitation defining the stretch rate of a plastic as "exceeding about 10% per second" was definite. *W. L. Gore & Associates, Inc. v. Garlock, Inc.* 721 F.2d 1540 (Fed.Cir. 1983). Applicant submits that "about" as used in describing the ranges for the length and molecular weight of the linker are clear. Applicant, therefore, requests that the rejection be removed.

As requested by the Examiner, the typographical error in claim 73 has been corrected. Applicant would like to thank the Examiner for pointing out this error.

**III. Rejection under 35 U.S.C. § 103, as being unpatentable over Bachovchin (U.S. Patent 5,776,902).** Claims 1 and 35 have been rejected under 35 U.S.C. § 103, as being unpatentable over Bachovchin (U.S. Patent 5,776,902). Applicant submits that the '902 patent does not render obvious the presently claimed invention and reiterates here the arguments made in the previous Response filed January 28, 2002; and furthermore, Applicant submits that the '902 patent does not qualify as prior art with respect to present application.

The present application, U.S.S.N. 09/289,321, filed April 9, 1999, is a continuation of U.S.S.N. 08/837,305, filed April 11, 1997, and now issued as U.S. Patent 5,965,532, which claims priority to U.S.S.N. 08/671,756, filed June 28, 1996. Therefore, all the subject matter disclosed in the present application has an earliest priority date of at least **April 11, 1997**, and some if not all of the subject matter may have an even earlier priority date of June 28, 1996. The '902 patent, being cited against the present application, issued **July 7, 1998**, from U.S.S.N. 08/454,920, filed May 31, 1995, by William W. Bachovchin. The present application's priority date of April 11, 1997 is over one year earlier than the issue date, and therefore the publication date, of the '902 patent; therefore, the '902 patent cannot qualify as prior art under sections 102(a) or 102(b) since it did not publish until *after* the priority date of the present application. Since the '902 patent does not qualify as prior art under sections 102(a) or 102(b), it must then

qualify as prior art under section 102(e) to qualify as prior art at all. However, the '902 patent does not qualify as prior art under subsection (e) either because the application must have been filed *by another*, and the inventor of the present application and the '902 patent are the same, *i.e.*, William W. Bachovchin, of Melrose, Massachusetts. Since the '902 patent is not prior art with respect to the present application, Applicant submits that the rejection under § 103 must be removed.

In view of the forgoing arguments, Applicant respectfully submits that the present case is now in condition for allowance. A Notice to that effect is requested.

Please charge any fees that may be required for the processing of this Response, or credit any overpayments, to our Deposit Account No. 03-1721.

Respectfully submitted,



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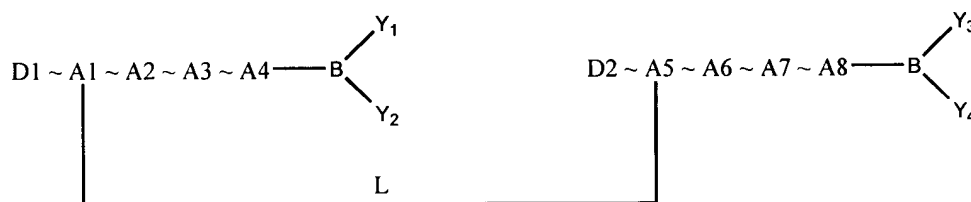
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## Appendix A

### Marked-up Version of Claims:

1. (Twice Amended) A compound, having the structure



wherein D1 and D2, independently, are selected from the group consisting of NH and NH<sub>2</sub>,

wherein N represents any isotope of nitrogen,

wherein H represents any isotope of hydrogen;

"~", independently, is selected from the group consisting of a single bond and a double bond;

B represents, independently, any isotope of boron;

A1 and A5 are, independently, selected from a group consisting of a C, a CX moiety and an N,

wherein C represents any isotope of carbon,

wherein X represents any atom [capable of forming] that forms a single bond with C;

each A2, A3, A4, A6, A7, and A8 are, independently, selected from a group consisting of a CX moiety, a CXZ moiety, a CZ moiety, an NX moiety, and an O,

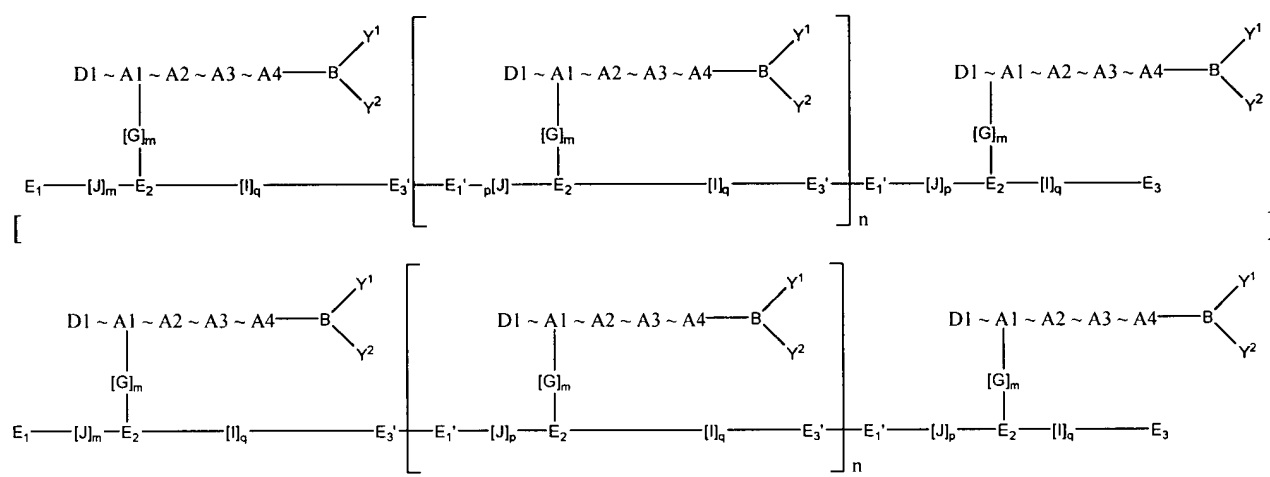
wherein X and Z, are, independently, selected from the groups consisting of any atom [capable of forming] that forms a single bond and any atom [capable of forming] that forms a double bond with C or N and wherein O represents any isotope of oxygen;

wherein each Y1, Y2, Y3, and Y4 are, independently, selected from the group consisting of hydroxyl moiety and any reactive moiety that converts to a hydroxyl group moiety under physiologic conditions; and

L represents a linker moiety

- (i) having a molecular weight ranging between about 100 daltons and about 2000 daltons,
- (ii) having a span ranging from about 20 Å to about 300 Å, and
- (iii) containing a chain of atoms selected from the group consisting of a combination of C, O, N, S, and P atoms, connected by single bonds or by double bonds in a manner that does not violate the laws of chemistry and wherein S represents any isotope of sulfur and P represents any isotope of phosphorous.

73. (Amended) A compound, having the structure



wherein D is, independently, selected from the group consisting of NH and NH<sub>2</sub>,

wherein N represents any isotope of nitrogen,

wherein H represents any isotope of hydrogen;

“~”, independently, is selected from the group consisting of a single bond and a double bond;

B represents, independently, any isotope of boron;

A1 is, independently, selected from the group consisting of a C, a CX moiety, and an N,

wherein C represents any isotope of carbon,

wherein X represents any atom [capable of forming] that forms a single bond with

C;

each A2, A3, and A4 are, independently, selected from the group consisting of a CX moiety, a CXZ moiety, a CZ moiety, an NX moiety, and an O,

wherein X and Z, independently, are selected from the group consisting of any atom [capable of forming] that forms a single bond and any atom [capable of forming] that forms a double bond with C or N and wherein O represents any isotope of oxygen;

wherein Y1 and Y2 are, independently, selected from the group consisting of a hydroxyl moiety and any reactive moiety that converts to a hydroxyl group moiety under physiological conditions;

n represents an integer between 1 and 200, inclusive;

wherein E1 and E3 are independently selected from the group consisting of a carboxylate, amino, imidazole, sulfhydryl, aldehyde, ester, amide, acid chloride, carbonate, and carbamate group such that the E1 and E3 [are capable of reacting and forming] react and form an -E1'-E3'— adduct with a covalent bond between E1' and E3';

wherein [J]<sub>p</sub>, [I]<sub>q</sub>, and [G]<sub>m</sub> together comprise a linker moiety, and wherein [G]<sub>m</sub>, [J]<sub>p</sub>, and [I]<sub>q</sub> represent, independently, a linker group (i) having a molecular weight ranging between about 100 daltons and about 2000 daltons, (ii) having a span ranging from about 20 Å to about 300 Å, and (iii) containing a chain of atoms selected from the group consisting of a combination of C, O, N, S, and P atoms, connected by single bonds, double bonds, or triple bonds in a manner that does not violate the laws of chemistry and wherein S represents any isotope of sulfur and P represents any isotope of phosphorus; and wherein m, p, and q represent, independently, an integer from 1 to 50, inclusive;

E2 is selected from the group consisting of CX, CH, N, PYZ, PU, and B such that E2 is capable of forming a covalent bond with [J]<sub>p</sub>, [G]<sub>m</sub>, and [I]<sub>q</sub> and

wherein C is any isotope of carbon;

X is, independently, selected from the group consisting of any atom [capable of forming] that forms a single bond with carbon;

Y is, independently, selected from the group consisting of any atom [capable of forming] that forms a single bond with phosphorous;

Z is, independently, selected from the group consisting of any atom [capable of forming] that forms a single bond with phosphorous;

H is any isotope of hydrogen;

N is any isotope of nitrogen;

P is any isotope of phosphorus;

B is an isotope of boron;

U is, independently, selected from the group consisting of any atom [capable of forming]  
that forms a double bond with phosphorous.